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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,635	12/12/2000	Hidetaka Oka	A-22141/US/A/CGJ 118	4752
324	7590	03/22/2010	EXAMINER	
Ciba Corporation Patent Department 540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591			ROBINSON, CHANCEITY N	
			ART UNIT	PAPER NUMBER
			1795	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/734,635	Applicant(s) OKA ET AL.	
	Examiner CHANCEITY N. ROBINSON	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,6-8,10 and 12-20 is/are rejected.
- 7) ☒ Claim(s) 5 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Applicant's request for reconsideration filed on November 20, 2009 was received. Claims 1-3 and 11 have been canceled. Claims 4-6, 8, 10, 12-15 and 17-18 have been amended.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on August 26, 2009.
3. The limitations of Claim 11, previously indicated as allowable, is now rejected due to the discovery of new art.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 recites "wherein the oligomer or polymer (A) is a binder polymer" However, there is no oligomer or polymer (A) recited in claim 4. There is insufficient antecedent basis for the limitation in claim 6.
6. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18 recites the limitation "(2) the resulting composition is applied to the substrate", "(3) the solvent, if present, is evaporated, at elevated temperature", and "(4) the coated substrate is patternwise exposed to irradiation in claim 18. However, there is no substrate, solvent or coated substrate recited in the independent claim 4. Independent claim 4 only recites a "photosensitive composition". There is

Art Unit: 1795

insufficient antecedent basis for this limitation in the claim. In order to further prosecution, for purposes of examination, the examiner has considered the substrate and coated substrate as the same as the substrate of claims 15 and 16.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claim 17 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Matsushima et al. (US 5,399,450)

Claim 17 is a product-by-process claim. Applicant is reminded of MPEP

2113: "[E]ven though product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Examiner notes claim 17 recites product by process language, "a color filter prepared by providing red, green, and blue (RGB) elements..." The limitation of RGB element is not a positive claim recitation in claim 17.

Regarding claim 17, Matsushima et al. teach a color filter and a pigment on a transparent substrate (abstract and column 2, line 67-column 3, line 6). Also, Matsushima et al teach providing a transparent electrode with on the surface on the substrate or on the surface of the color filter layer (column 3, lines 7-25).

11. Claims 4, 6-8, 10, 12-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laridon et al. (US 3,558,309) in view of Awaji et al. (US 5,849,857).

Regarding claims 4, 6-8, 10, 12-16 and 18-20, Laridon et al. disclose an alkaline developable, photosensitive composition comprising (a) at least one alkaline soluble binder resin, prepolymers or monomer component (binding agent such as polymethyl methacrylate; column 4, line 70-line 5 and example 9); (b) oxime ester initiator (column 1, lines 50-60) and (c) a photopolymerizable compound (ethylenically unsaturated organic compound; column 1, lines 45-50). Laridon et al. teach the photopolymerizable compound is a liquid (column 5, lines 34-

Art Unit: 1795

column 6, line 6). Examiner notes that the oxime ester initiator disclosed by Laridon et al. in column 1, line 54- column 4, line 30, more specifically compound 13, meets the limitation of the compound of formula I in the instant claim 4, wherein R1 is a benzoyl which is substituted or unsubstituted by one or more C1-C6alkyl or halogen and Ar1 is phenyl or substituted phenyl. Laridon et al. disclose the photopolymerizable composition is useful in preparing photographic images, wherein the composition is applied to coated substrate (base or support; column 4, lines 40-56), the solvent, if present, is evaporated at elevated temperature (column 4, lines 41-56), the coated substrate is patternwise exposed to irradiation and the irradiated sample is developed with an aqueous solution to removed non-exposed (uncured or unexposed) areas and the sample is cured (active rays 2500-4000 angstroms; 250 nm to 400nm; column 4,lines 30-34 and column 6, lines 31-57).

Laridon et al. do not explicitly disclose the photosensitive composition comprises an epoxy resin having two epoxy groups in a molecule as recited in claim 4. However, Awaji et al. disclose the photosensitive resin composition comprising a difunctional epoxy resin having two epoxy groups in a molecule. Awaji et al. disclose the epoxy resin having two epoxy group aids in providing the high-performance liquid photosensitive resin composition useful for a solder resist and color filters (abstract and column 2, line 55- column 3, line 44). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a difunctional epoxy resin to the photosensitive composition of Laridon et al. in view of improving flexibility and chemical resistance of the coated layer.

Further regarding claim 7, it is a product-by-process claim. Applicant is reminded of MPEP2113: "[E]ven though product-by-process claims are limited by and defined by the

Art Unit: 1795

process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Examiner notes claim 7 recites product by process language, "a resin obtained by the reaction... or is an addition product formed between a carbonyl....." The limitation of the reaction and the addition product forming the resin is not a positive claim recitation in claim 7.

Further regarding claims 8 and 10, Laridon et al. do not explicitly disclose the photosensitive composition can additionally comprises of at least one photosensitizer compound (D) and further additive (E) as recited in instant claim 8 and 10. However, Awaji et al. disclose the liquid photosensitive resin composition comprises at least one additional initiator (photosensitizer) such as benzophenone, thioxanthone or anthraquinone (column 10, lines 15-44). The photoinitiator aids improving the irradiation properties of the coating layer and surface hardness. Further, Awaji et al. disclose the photosensitive composition can comprises additional compounds such as fillers (inorganic fillers), epoxy curing agents, color pigments (colorants), defoaming (antifoaming) agents and leveling agents (column 11, lines 1-9) to improved the developability properties of the coating layer. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include an additionally initiator (photosensitizer) and additive such as epoxy curing agent or colorant to the photosensitive composition of Laridon et al. in view of improving the irradiation, surface hardness and developability properties of the coating layer.

Allowable Subject Matter

12. Claims 5 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments with respect to claims 4-10 and 12-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHANCEITY N. ROBINSON whose telephone number is (571)270-3786. The examiner can normally be reached on Monday to Friday (with every other Friday off): 9:00 am-6:00 pm eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chanceity N Robinson/
Examiner, Art Unit 1795

/Cynthia H Kelly/
Supervisory Patent Examiner, Art Unit 1795